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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,643	10/29/1999	EDMUND COLBY MUNGER	00479.84602	6165

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EXAMINER

CHOUDHARY, ANITA

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 02/11/2004

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/429,643

Applicant(s)

MUNGER ET AL.

Examiner

Anita Choudhary

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-20,22-24,26-42,44-51,53,68-70 and 85-97 is/are pending in the application.
- 4a) Of the above claim(s) 85-97 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4-19,23,24,26-41 and 45-49 is/are allowed.
- 6) ☒ Claim(s) 20,22,42,44,50,51,53 and 68-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 85-97 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2,4,5,6,8,9,11</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The amendment filed on November 14, 2003 under 37 CFR 1.312 has been entered. Claims 1, 2, 4, 6-10, 12, 13, 15-17, 19, 20, 23, 24, 26-32, 34, 35, 37-39, 41, 42, 44-50, 68-70 have been amended and are presented for further examination. Claims 3, 21, 25, 43, and 52 have been cancelled. New claims 85-97 are presented.

Claims 1, 2, 4-20, 22-24, 26-42, 44-51, 53, 68-70 and 85-97 are presented.

Election/Restrictions

Newly submitted claims 85-97 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 85-97 are directed towards both a first and second node transmitting over a network in a two-way communications system which is a separate from the original claims that present only a first computer transmitting to a second computer.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 85-97 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Response to Arguments

Applicant's arguments with respect to claims 20, 42, 50, and 68 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 20, 22, 42, 44, and 68-70 are rejected under 35 U.S.C. 102(e) as being anticipated by Thalheimer et al (US 5,996,016). Thalheimer shows address aliasing, a feature that allows multiple addresses to be assigned to a single network interface (col. 1 lines 38-40). Thalheimer shows:

In referring to claim 20, Thalheimer shows, for each of a plurality of data packets, randomly selecting one of the plurality of physical transmission paths though the plurality of computers (col. 4 lines 25-45).

Selecting a next pair of source and destination network addresses generated from an algorithm that generates plurality of source and destination network addresses each associated with one physical transmission path (col. 4 lines 25-45).

In referring to claim 22, Thalheimer shows avoiding selection of path that is not operational (fig. 3).

In referring to claim 42, Thalheimer shows:

Router (fig. 4, 52) receiving plurality of packets for transmission.

Wherein router randomly selects one of a plurality of physical transmission paths through the plurality of computers and randomly transmitting each data packet over the randomly selected path (col. 5 lines 45-61).

Using a pair of source and destination network addresses generated from an algorithm that generates plurality of source and destination network addresses each associated with one physical transmission path (col. 4 lines 25-64).

In referring to claim 44, Thalheimer shows avoiding selection of path that is not operational (fig. 3).

In referring to claim 68, Thalheimer shows transmitting computer (20) that transmits data packets to a receiving computer over network, wherein the transmitted computer comprises instructions that execute the step of, for each transmitted data packet, inserting into a header of the data packet a network address for extraction by the receiving node, wherein the network address is used to route data packets over the network and is generated using an algorithm that selects the network address randomly from a plurality of network addresses that are each mapped to the receiving computer (col. 4 lines 25-64).

In referring to claim 69, Thalheimer shows using IP network address (col. 4 lines 34-41).

In referring to claim 70, Thalheimer the transmitting computer transmits information to the receiving computer sufficient to establish a set of valid network address (col. 5 lines 14-33).

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Claims 50, 51, and 53 are rejected under 35 U.S.C. 102(e) as being anticipated by Shannon (6,233,618).

In referring to claim 50, Shannon shows an access control of data on a network. Shannon discloses:

- A receiving computer (network device 100) that receives data packets from a transmitting computer (client) executing the steps for:
- Extracting a discriminatory value inserted by the transmitting computer and comparing the extracted value to a set of valid discriminatory values on the basis of information previously shared with the transmitted computer (database information) (col. 13 lines 34-51).
- In response to a detected match, accepting the received data packet for further processing and otherwise rejecting the data packet (col. 13 lines 52-65).
- Receiving computer maintains a window (table at the database) of valid values, wherein the window is moved (moves to table 2) in response to detecting matches.

In referring to claim 51, extracting as the discriminatory value an IP address from the header portion of the data packet (fig. 3, col. 13 lines 37-51).

In referring to claim 53, receiving computer receives information from the transmitting computer sufficient to establish the set of valid discriminatory values (col. 6 lines 28-47).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rochberger et al. (US 6,061,736) in view of Thalheimer et al (US 5,996,016).

Rochberger shows a router coupled to a plurality of computers connected to each other through physical transmission paths. Rochberger shows the steps for:

Router randomly selecting one of a plurality of physical transmission paths through the plurality of computers and randomly transmitting each data packet over the randomly selected path (see abstract, col. 2 lines 41-59, col. 4 lines 1-10).

Although Rochberger shows substantial features of the claimed invention, Rochberger does not show using a pair of source and destination network addresses generated from an algorithm that generates a plurality of pairs of source and destination addresses each associated with the one randomly selected physical transmission path. Nonetheless this feature is well known in the art, and would have been an obvious modification to the system disclosed by Rochberger as evidenced by Thalheimer.

In an analogous art, Thalheimer shows a system for a single network adaptor having more than one network address. Thalheimer shows: pair of source and destination network addresses generated from an algorithm that generates plurality of source and destination network addresses each associated with one physical transmission path (col. 4 lines 25-64).

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Given this feature, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system shown by Rochberger by employing the features shown by Thalheimer, in order to perform network testing of network interfaces more efficiently (col. 1 lines 49-65).

In referring to claim 44, Thalheimer shows avoiding selection of path that is not operational (fig. 3).

Allowable Subject Matter

Claims 1, 2, 4-19, 23-24, 26-41, and 45-49 are allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

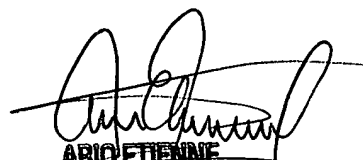
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita Choudhary whose telephone number is (703) 305-5268. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC
February 6, 2004


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